

**YEAR 5 KNOWLEDGE
ORGANISERS
AUTUMN 2**



Hanslope Primary School

Computing Knowledge Organiser

Year 5: Creating Media – Media Video Editing

How does this link to my previous learning?

Use technology purposefully to create, organise, store, manipulate and retrieve digital content

What key vocabulary will I learn:

- **Audio** – Connected with sound and the recording and broadcasting of sound
- **Video** - A recording of moving pictures and sound, especially as a digital file
- **Themes** - The main subject of a talk, book, film, etc.
- **Message** - A short piece of information that you give to a person when you cannot speak to them directly
- **Dialogue** - Conversation that is written for a book, play, or film
- **Plot** - The story of a book, film, play
- **Zoom** - To (cause a camera or computer to) make the image of something or someone appear much larger and nearer, or much smaller and further away
- **Props** - An object used by the actors performing in a play or film
- **Angle** - The space between two lines or surfaces at the point at which they touch each other, measured in degrees
- **Tilt** - The space between two lines or surfaces at the point at which they touch each other, measured in degrees

National Curriculum Links:

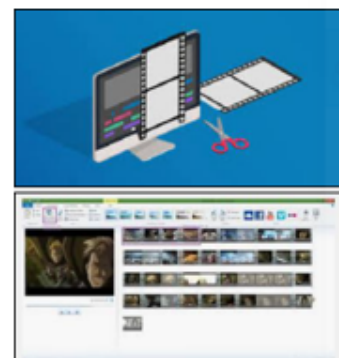
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

How does this link to my future learning?

- Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems, and content that accomplish given goals, including collecting, analysing, evaluating, and presenting data and information

What will I know by the end of this unit:

- To explain what makes a video effective
- To use a digital device to record video
- To capture video using a range of techniques
- To create a storyboard
- To identify that video can be improved through reshooting and editing
- To consider the impact of the choices made when making and sharing a video





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Design Technology Knowledge Organiser

Year 5: Mechanisms (pulleys or gears)

Overview:

Mechanisms are the parts that make something work.

-Mechanisms are all around us. A set of related mechanisms used to create movement is called a mechanical system.

-Gears are toothed wheels (cogs) that lock together and turn one another. When one gear is turned the other turns as well.

The wheels are usually different sizes, so that one gear speeds up to slow down the next gear. They therefore increase the power of a turning force.

-Pulleys are like gears, but the wheels do not lock together. The wheels are instead joined together by a drive belt. Pulleys can be used to affect the speed, direction or force of a movement.



National Curriculum Links:

- Design, make and evaluate products
- Technical knowledge: understand and use mechanical systems in their products [for example, gears, pulleys, cams]

What key vocabulary will I learn?

Mechanism, mechanical system, gear, pulley, lever, cogs, force, driver, follower, motor spindle.

What steps will I follow to create my final product?

Designing

Gears and Pulleys

-The product can run using either a gear or pulley mechanical system.

-In either case, you need to understand the ratio (how often larger wheels turn in relation to smaller pulleys). With gears, this can be done by counting the number of teeth (see below).

Num. Teeth	Rotation (spins)
8 and 16	2:1
8 and 24	3:1
24 and 24	1:1
8 and 40	5:1

As a part of the design process, you should be able to sketch and annotate different ideas. You should also be able to plan the main stages of making, using either a checklist, a storyboard, or a flowchart.

Making

-In order for the vehicle to move, it is essential that the mechanical system is planned effectively, and include an input, a process, and an output.

-e.g. Batteries hold stored power, accessed by using a switch (input) to enable a motor to set in motion the motor spindle Motor spindles can attach the motor to the gears/ pulley system (process), which in turn propels the axles and/or wheels to move the vehicle forwards/ backwards (output).

Evaluating

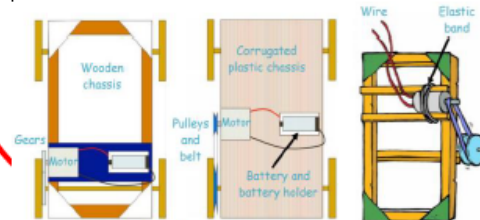
-How well does your mechanism work? Does it move smoothly?

-Does it meet its purpose?

-What would your audience think about your product? What would they like about it? What would they not like?

-What problems did you face in constructing your mechanical system? What changes did you need to make?

What could you still improve about your product? How would you do things differently next time?



Health and Safety

-Remove any jewelry and tie back long hair.

-Wear an apron and roll up your sleeves.

-Walk safely and calmly around the classroom/ workshop.

Keep your work area and floor area clear – keep your belongings well clear.

Follow the teacher's cutting instructions carefully.

Make sure that you are wearing the correct equipment for tasks.

If you need to move around with scissors, hold around the closed blades, facing down.

Report all spillages & clean up properly after yourself.



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History Knowledge Organiser

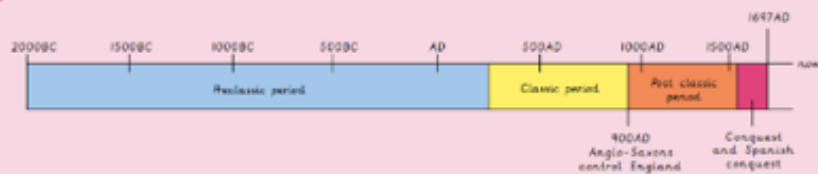
Year 5: How did the Maya civilisation compare to the Anglo-Saxons?

How does this link to my previous learning?

This links to previous civilisations and their lifestyles – e.g. Would you prefer to live in the Stone Age, Iron Age or Bronze Age?

What key vocabulary will I learn?

- abandon
- city-state
- Classic period
- creation story
- decline
- deforestation
- drought
- hieroglyphics
- pyramid
- rainforest
- slash and burn
- tropical rainforest



National Curriculum Links:

- To learn about a non-European society that provides contrasts with British history – one study chosen from: early Islamic civilization, including a study of Baghdad c. AD 900; Mayan civilization c. AD 900; Benin (West Africa) c. AD 900-1300.
- To understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims
- To know and understand significant aspects of the history of the wider world: the nature of ancient civilisations

How does this link to my future learning?

Links to future work on different civilisations including the Greeks.

What will I know by the end of this unit:

- Describe the key physical features of the Maya civilisation.
- Sequence the key periods in the Maya civilisation.
- Identifying periods that were happening in Britain at the same time.
- Explain the challenges facing the Maya in the rainforest.
- Explain how the Maya settled in the rainforest.
- Name the features of Maya houses.
- Identify the similarities and differences between Maya and Anglo-Saxon.
- Explain the Maya creation story.
- Identify the characteristics of important gods or goddesses.
- Make deductions about cities.
- Name the features of Maya cities.
- Create a plan of a Maya city, including the main features.
- Explain and evaluate the reasons for the decline of the Maya civilisation.



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Music Knowledge Organiser

Year 5: Blues

How does this link to my previous learning?

- This links to previous learning to sing and play chords in time to music.

National Curriculum links:

- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with accuracy, fluency, control and expression.
- Improvise and compose music for a range of purposes using the inter-related dimensions of music
- Listen with attention to detail and recall sounds with increasing aural memory
- Use and understand staff and other musical notations
- Appreciate and understand a wide-range of high-quality live recorded music drawn from different traditions and from great composers and musician
- Develop an understanding of the history of music

What key vocabulary will I learn?

- Chord- Two or more notes that are played at the same time and work in harmony.
- Scale- Any set of musical notes which are in order of their pitch.
- Ascending scale- A scale in which the pitch of the notes goes up.
- Descending scale- A scale in which the pitch of the notes goes down.
- 12 bar blues- A series of chords played in a specific order.
- Blues scale- A set of notes used to play a melody over a 12-bar blues.
- Improvisation- Making up music as it is played or performed.
- Bent notes- A musical notes that varies in pitch usually going up slightly at the end.
- Bar- A section of music with a specific number of beats (in blues there are usually 4 beats in a bar).
- Quaver- A note which lasts for half a beat.

How does this link to my future learning?

This links to future learning about composition.

What will I know by the end of this unit:

- Name three key features of blues music.
- Sing in tune, using vocal expression to convey meaning.
- Explain what a chord is and play the chord of C sixteen times.
- Play the 12-bar blues correctly.
- Play the notes of the blues scale in the correct order, ascending and descending.
- Play a selection of blues scales notes out of order in their own improvisation.



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Autumn 2

PE Knowledge Organiser

Year 5: Social Skills/ Dance

How does this link to my previous learning?

- Builds upon the dance and social skills learnt in Y4

National Curriculum Links:

- Develop and apply control and balance in different ways.
- Enjoy communicating, collaborating and competing with each other.
- Compare their performance with previous ones and demonstrate improvement to achieve their personal best.
- Apply and develop a broader range of skills, learning how to use them in different ways and to link them to make actions and sequences of movement.
- Develop an understanding of how to improve in different physical activities and sports

How does this link to my future learning?

- Provides the key concepts for Y6: more advanced performances

What key vocabulary will I learn:

- Graceful
- Smooth
- Sequence
- Repeat
- Reverse
- Diverse
- Control
- Exact
- Demonstrate
- Linking
- Melody
- Musical phrase
- Supporting
- Confidence
- Inspiration

Social skills:

What will I know by the end of this unit:

- I can move smoothly and with minimum wobble.
- I can stay balanced on the line with head up.
- I can move with opposite arm and leg moving forwards.
- I can maintain balance throughout.
- I can move smoothly and with control.
- I can coordinate movements with my partner

Dance:

- I can perform with balance and control when holding a shape and when moving between shapes / landing.
- Start with exploring shapes on 2 feet before moving on to 1 foot, remembering not to rush my movement.
- I can perform a variety of smooth, graceful movements when moving between shapes, with no stopping between moves.
- I can perform with control when moving, turning, jumping and landing.



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PSHE Knowledge Organiser – Year 5

Autumn 2: Health and Wellbeing

How does this link to my previous learning?

In Year 4, children focused on:

- Develop emotional maturity
- Learning that we experience a range of emotions and are responsible for these
- Appreciating the emotions of others
- Develop a growth mindset
- Identify calming activities and develop independence in dental hygiene.

What key vocabulary will I learn:

Fail	To be unsuccessful in achieving a goal.
Goal	Something you want to achieve.
Protect	To keep someone safe from something.
Relaxation	Doing calming activities such as having a bath or reading a book.
Responsibility	Being in charge of our own actions.
Steps	To do what is necessary to reach a goal.

National Curriculum Links:

In Year 5, children need to Learn to take greater responsibility for sleep, sun safety, healthy eating and managing feelings; setting goals and embracing failure; understanding the importance of rest and relaxation.

How does this link to my future learning?

This year, pupils will:

- Develop independence for protecting myself in the sun.
- Understand the relationship between stress and relaxation.
- Consider calories and food groups to plan healthy meals.
- Develop greater responsibility for ensuring good quality sleep.
- Take responsibility for my own feelings.

What will I know by the end of this unit:

- To understand the risks of sun exposure.
- To know that relaxation stretches can help us to relax and de-stress.
- To know that calories are the unit that we use to measure the amount of energy certain foods give us.
- To know that what we do before bed can affect our sleep quality.
- To understand what can cause stress.
- To understand that failure is an important part of success.



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Religious Education Knowledge Organiser

Year Five-Does God communicate with humans?

National Curriculum Links:

- To understand the Christian story from a biblical viewpoint.
- To explore prayer as communication.

How does this link to my previous learning?

Year four - Do Murtis help Hindus understand God?
Does the Christmas narrative need Mary?
Is a holy journey necessary for believers?
Did Jesus *really* do miracles?

How does this link to my future learning?

Year Five- Are you inspired?
Year Six - Is "God made Man" a good way to understand the Christmas story?
Can we know what God is like?

What I will know by the end of this unit:

In Jesus' day, the Jews were looking forward to the coming of the Messiah. Christians believe Jesus was the son of God because hundreds of years before His birth, people in the Old Testament said He would arrive one day.

Jesus' birth was foretold by Isaiah (Ch7v14) "The virgin (young girl) will be with child and will give birth to a son and will call him Immanuel." (Immanuel means God is with us.) Isaiah also prophesied that someone would be known as the "suffering servant," who suffers because of the sins of others. Jesus is said to fulfil this prophecy through his death on the cross. Micah prophesied that the birthplace of the Messiah (Son of God) would be Bethlehem 800 years before Jesus was born.

Jews do not believe that Jesus was the Messiah and are still waiting for these prophecies to be fulfilled.

For Sikhs, God communicates through meditation; He has revealed Himself through His creation as He is creator. He also communicates by His spirit, and also through people's common sense and divine enlightenment.

What key vocabulary I will learn:

Prophet – Somebody who claims to interpret God's will and communicate with the commands of God.

Prophesied – Foretold or predicted by God through a person.

Christians believe **prayer** is communication with God as it is both speaking and listening.

When reading the **Bible**, Christians understand that they are reading God's words.

Angels are heavenly beings that bring God's word to people.



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Science Knowledge Organiser

Year Five – Animals including humans- Development to old age

How does this link to my previous learning?

- Living things and their habitats – lifecycles (Year 2)
- Staying Healthy (Year 2)
- Animals including humans – Skeletons and muscles (Year 3)

What key vocabulary will I know:

Life expectancy – The length of time, on average, that a particular animal is expected to live

Adult- A person who is fully grown or developed

Child- A young human being below the age of puberty.

Adolescent- Also known as teenager, it is the process of developing from a child to an adult.

Foetus - An unborn or unhatched offspring of a mammal, in particular an unborn human more than eight weeks after conception

Mammal- A warm-blooded vertebrate, distinguishable by the possession of hair or fur.

Nutrition- The process of providing or obtaining the food necessary for health and growth

Offspring- A person's child or children/ an animal's young.

Puberty- The process of physical changes through which a child's body matures into an adult.

Reproduction - when an animal or plant produces one or more individuals similar to itself.

Life cycle - the series of changes that an animal or plant passes through from the beginning of its life until its death

Gestation - is the period of time that a mammal carries offspring, or babies, inside the body before giving birth. The length of gestation is different for each type of mammal.

National Curriculum Links:

- Describe the changes as humans develop to old age.

How does this link to my future learning?

- Animals including humans - Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function (Year 6)

What will I know by the end of this unit:

- I can describe the changes which happen as a human develops to old age (link to RSE/PSHE)
- I can describe physical changes which happen to males and females bodies during puberty
- I can describe how old age can affect the human body
- That there are 6 stages in the human lifecycle.
- That each stage of the lifecycle shows development.
- To understand the different gestation periods of other mammals.
- To understand that the length of time in the womb for humans and other mammals varies considerably.
- To compare different gestation periods to humans and look for patterns in data.

